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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

MATTHIAS KUHN  
STEFAN LINGEL

Serial No.: 10/609,096

Filed: June 27, 2003

For: SYSTEM FOR CHEMICAL  
MECHANICAL POLISHING  
COMPRISING AN IMPROVED PAD  
CONDITIONER

Examiner: George Binh Minh Nguyen

Group Art Unit: 3723

Att'y Docket: 2000.105900/DE0291

Customer No.: 23720

**RESPONSE TO RESTRICTION  
REQUIREMENT DATED JULY 27, 2004**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

CERTIFICATE OF MAILING

I hereby certify that this paper or fee is being deposited with the United States Postal Service with sufficient postage as "FIRST CLASS MAIL" addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, this 10<sup>th</sup> day of August, 2004.

*Mary Paul*  
Signature

This paper is submitted in response to the Restriction Requirement dated July 27, 2004, for which the one-month date for response is August 27, 2004.

It is believed that no fee is due; however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to this document, the Director is authorized to deduct said fees from Advanced Micro Devices, Inc. Deposit Account No. 01-0365/DE0291. In the event the monies in that account are insufficient, the Director is authorized to withdraw funds from Williams, Morgan & Amerson, P.C. Deposit Account No. 50-0786/2000.105900.

In the Office Action, the Examiner identified five distinct species I-V that correspond, according to the Examiner, to Figures 2A-2B, 3, 4, 5 and 6, respectively. The Examiner also indicated that claims 1 and 25 are generic.

Applicants respectfully traverse the Examiner's restriction requirement. First, as an initial matter, irrespective of the patentability of the various "species" identified by the Examiner, it is believed that searching for prior art disclosing such invention would not be unduly burdensome on the Examiner. Applicants have paid a substantial fee and believe they are entitled to have all of such claims examined, allowed and issued in a single application to avoid the unnecessary requirement of paying additional maintenance fees. Thus, it is believed that the restriction requirement issued in this case is improper for at least this basis.

Figures 2A-2B disclose an embodiment where the fluid jet 216 is movable in a circular path by actuation of a drive device 217 that is operatively coupled to the mobile mount 214. In the illustrative embodiment depicted in Figure 3, the fluid jet 316 is adapted to be moved in a radial direction by the drive device 317 that is operatively coupled to the mobile mount 314. Figure depicts a particular embodiment where a plurality of nozzle jets 416, 419 and 421 are coupled to the mobile mount 414. The nozzles may be moved by actuation of the drive device 417. The nozzle jets depicted in Figure 4 may be driven in a circular path (as indicated by the double arrow in Figure 4) or they may be driven in a radial (linear motion) direction similar to that discussed with respect to Figure 3. Page 13, line 17 – page 14, line 14. The embodiment depicted in Figure 5 shows a particular line shaped nozzle that may be employed with the present invention. Figure 6 depicts an illustrative embodiment of the invention where a plurality of fluid jets 616 and 619 are operatively coupled to the polishing head 630.

As best understood from the Examiner's restriction requirement, it appears that the Examiner is basing the identification of the "species" based upon the physical configuration of the various embodiments depicted in Figures 2A-6. While Applicants strongly disagree with the Examiner's restriction requirement, it is the configuration of the devices that will be addressed with respect to identifying claims as being generic or directed to one or more "species."

The Examiner indicated that claims 1 and 25 are generic. Applicants respectfully submit that, in addition to those generic claims, claims 2, 5-8, 18-19, 26-27, 30-33, 37 and 42 are likewise generic. All of these claims are generic in the sense that they are directed to a system (or method) involving use of a pad conditioner having at least one fluid jet for directing fluid toward the polishing pad.

For example, dependent claim 2 further recites that the pad condition comprises a high pressure fluid supply and a nozzle connected to the fluid supply to supply the fluid jet. The invention defined by dependent claim 2 is certainly generic to any of the embodiments disclosed in the application.

Similarly, dependent claims 5-8 are directed to the composition of the fluid jet material, *e.g.*, liquid, water, gas, etc. As understood by the undersigned, this is not the basis for the Examiner's restriction requirement. Thus, it is believed that all of these claims are generic as the fluid jet may be comprised of any of these materials for any of the physical embodiments disclosed in the application.

Claims 18-19 are likewise believed to be generic as they merely recite the addition of a polishing pad and a slurry being supplied to the polishing pad, both of which are clearly generic to all of the embodiments disclosed in the application.

Claims 26-27 are also generic as they relate to the manner in which each of the various disclosed physical embodiments of the invention may be operated.

Dependent claims 30-33 are likewise believed to be generic. These claims are directed to the composition of the fluid passing through the fluid jet.

Dependent claim 37 is believed to be generic because all of the disclosed physical embodiments of the invention are adapted to move the fluid jet in a plane substantially parallel to a surface of the polishing pad.

Claim 42 is also believed to be generic as it is simply directed to supplying slurry to the polishing pad, which applies to all embodiment of the application.

To the extent the Examiner wishes to maintain the ill-founded restriction requirement issued in this case, Applicants submit that the following claims apply to the Examiner-identified “species”:

Figure 2A-2B	Claims 3-4, 9-11, 13-17, 28-29, 34-35, 39 and 43
Figure 3	Claims 3-4, 9-10, 12-13, 14, 16-17, 28-29, 34, 36 and 43
Figure 4	Claims 3-4, 9-11, 13-16, 20-24, 28-29, 34-36, 39-40 and 43
Figure 5	Claims 3, 9-10, 13-14, 16, 28-34 and 43
Figure 6	Claims 3-4, 14, 28 and 29

If the Examiner maintains the restriction requirement issued in this case, Applicants elect to prosecute, in addition to the generic claims identified above, the claims identified as being associated with Figures 2A-2B, *i.e.*, Species I as identified by the Examiner.

The Examiner is invited to contact the undersigned attorney at (713) 934-4055 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

WILLIAMS, MORGAN & AMERSON  
CUSTOMER NO. 23720

A handwritten signature in black ink, appearing to read 'J. Mike Amerson', is written over a horizontal line.

Date: August 10, 2004

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